Serial No.: 09/846,762

In the Claims:

Please amend the claims as follows:

- 1. (Once Amended) A roller for a roller assembly, the roller comprising:
- (a) a shaft; and
- (b) a first tire mounted relative to the shaft, the first tire including:
 - (i) a compliant core affixed relative to the shaft for rotation with the shaft; and
 - (ii) a non-compliant layer connected to the core for rotation with the core.
- 2. The roller assembly of Claim 1, wherein the shaft comprises a plastic shaft.
- 3. The roller assembly of Claim 1, wherein the shaft has a linear variance loss than .03 inches per linear foot
- 4. The roller assembly of Claim 1, wherein the compliant core comprises a cellular structure.
- 5. The roller assembly of Claim 4, wherein the cellular structure has an open cell structure.
- 6. The roller assembly of Claim 4, wherein the cellular structure comprises polyurethane.
- 7. The roller assembly of Claim 1, wherein the non-compliant layer comprises a layer of elastomeric material.
- 8. The roller assembly of Claim h, wherein the non-compliant layer has a durometer less than 60 Shore A.
- 9. The roller assembly of Claim 1, wherein the non-compliant layer has a durometer greater than 35 Shore A.
- 10. The roller assembly of Claim 1, wherein the non-compliant layer has a durometer greater than 35 Shore A and less than 60 Shore A.

Serial No.: 09/846,762 The roller assembly of Claim 1, wherein the non-compliant layer includes a 11 metal tube (Once Amended) The roller assembly of Claim 11, comprising a layer of 12. coefficient of friction enhancing material on the metal tube. The roller assembly of Claim 1, wherein the non-compliant layer comprises a 13. plastic tube. (Once Amended) The roller assembly of Claim 13, comprising a layer of 14. coefficient of friction enhancing material on the plastic tube. The transport mechanism of Claim 1, comprising a second tire mounted on the 15. shaft.

- 16. The roller assembly of Claim 15, wherein the second tire comprises:
- (a) a compliant core; and
- (b) a non-compliant layer on the core.
- 17. The roller assembly of Claim 16, wherein the non-compliant layer comprises a layer of elastomeric material.
- 18. The roller assembly of Claim 16, wherein the non-compliant layer comprises a layer of synthetic rubber.
- 19. The roller assembly of Claim 16, comprising a coefficient of friction enhancing surface on the non-compliant layer of one of the first tire and the second tire.
- 20. (Once Amended) A tire for a roller for transporting a sheet material, the roller including a shaft, and having an unloaded state and a loaded state, the tire comprising:
 - (a) a compliant core connected relative to the shaft for rotation with the shaft; and
- (b) a non-compliant layer connected to and surrounding the compliant core and the shaft, the compliant core and the non-complaint layer being concentric in the unloaded configuration, and the shaft being offset from the concentric state in the loaded state, the non-compliant layer selected to preclude a deformation of the non-compliant layer in the loaded

X S

S Sand

Serial Not. 09/846,762

state sufficient to induce skewing or scuffing of the sheet material upon contact with the sheet material.

- 21. (Once Amended) The tire of Claim 20, wherein the non-compliant layer has a constant cross section between the unloaded state and the loaded state.
- 22. A\roller having an unloaded concentric configuration and a loaded non-concentric configuration, the roller comprising:
 - (a) a shaft;
 - (b) a non-compliant layer; and
- (c) a compliant core intermediate the non-compliant layer and the shaft, the compliant core selected to produce a varying annular segment size of the compliant core and the non compliant layer selected to produce a constant annular segment size during rotation of the shaft in the loaded non-concentric configuration.
- 23. The roller of Claim 22, wherein the non-compliant layer is one of a metal tube or a plastic tube.
 - 24. The roller of Claim 22, wherein the compliant layer has a cellular structure.
 - 25. (Once Amended) A tire for a roller, comprising:
 - (a) a hub; and

(b) a first tire mounted on the hub for rotation with the hub, the first tire including:

- (i) a compliant core affixed to the hub for rotation with the hub; and
- (ii) a non compliant layer connected to the core for rotation with the core for rotation with the core.